

Research Summary

The University of Montana
and the
National Park Service



May 2000

EVALUATION OF THE NATIONAL PARK SERVICE FEE DEMONSTRATION PROGRAM: 1998 VISITOR SURVEY

John Duffield, David Patterson, Chris Neher, and Nina Chambers

The National Park Service Recreational Fee Demonstration Program

Under Public Law 104-134, Congress authorized the National Park Service (NPS) to implement a three year Recreational Fee Demonstration Program to establish new fees and increase existing entrance and other recreation user fees within specified park units, beginning in 1997. Individual parks are allowed to keep 80% of this fee revenue, with the remaining 20% retained by the NPS for distribution to other park units.

As part of the NPS Recreational Fee Demonstration Program, The University of Montana was contracted to conduct a survey of visitors and evaluate their reaction to the increased fees. This research summary highlights the key findings from the 1998 visitor survey and compares the results to a similar study conducted in 1997 by Lundgren and Lime. Three questions were addressed in this 1998 study:

1. How do fee changes affect the park experience for visitors, including impact on the efficiency of the visit (efficiency impacts)?
2. How do changes in fees alter the mix of visitors and characteristics of their visits to the parks (equity impacts)?
3. How do changes in fees affect the local communities and regional economies (local economic impacts)?

A description of the study methods is at the end of this research summary.

More than 2,600 Visitors Responded

In the summer and early fall of 1998, park visitors in 13 NPS units were surveyed regarding the NPS Recreational Fee Demonstration Program. In total, 3,735 surveys were distributed. Of these, 2,644 surveys were returned for a response rate of 70.8%.

Visitors Contacted were Diverse

Visitors were surveyed from all 50 states, the District of Columbia, Guam, and from 26 foreign countries. A wide range of ages were represented; the average age was 46.9 years; 52.6% were male, and 47.4% were female. The majority of the respondents were white, and they tended to be above average in income and education.

The Majority of Visitors Think Fee Levels at Parks are "About Right"

Although percentages varied across park units, in general, the respondents were supportive of the fees charged by the NPS. For the entire sample of 13 park units, 83.4% of respondents felt the fee charged was either "about right" or "too low" (Figure 1).

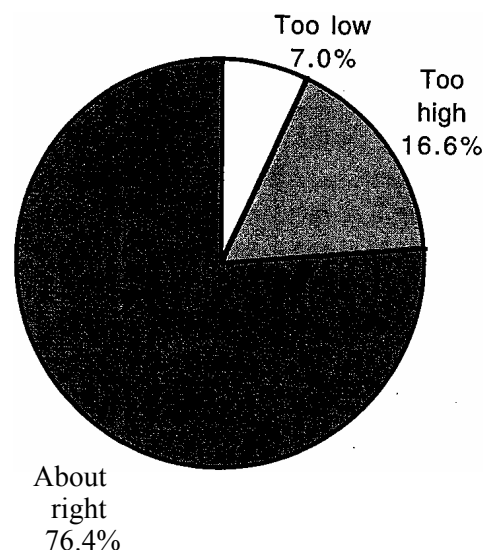


Figure 1. Appropriateness of the level of entry fees, 1998.

1998 Visitor Opinions about Fees Consistent with 1997 Findings

The results for the 1998 study are consistent with the findings from 1997. Figure 2 shows a comparison of the studies at the aggregate level, that is, for all the parks included in each study. (The 1998 study included 5 parks not included in the 1997 study.) Comparing the results, the percentage of visitors that thought the fees were either "too low" or "about right" was nearly identical (83.0% in 1997; 83.4% in 1998). The percentage of visitors that thought the fees were "too high" also remained similar-17.0% in 1997 and 16.6% in 1998.

Percent of respondents

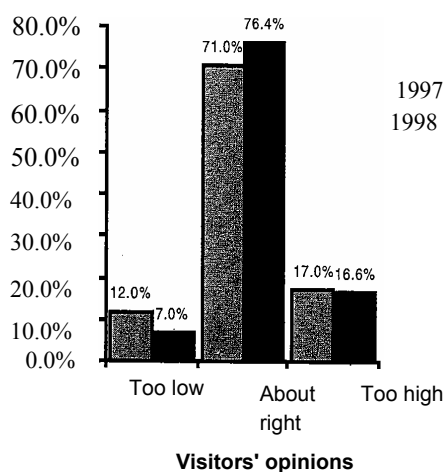


Figure 2. Comparison of 1997 and 1998 visitors' opinions regarding appropriateness of fee levels.

Visitors' opinions regarding fees varied with their income levels. More respondents in low income brackets thought fees are "too high" than respondents in high income brackets. Figure 3 shows the percentage of respondents in each income bracket who thought fees were "too high." Results of the 1997 and 1998 studies were similar. In the lowest income bracket, the percentage of visitors that thought the fees were "too high" was nearly identical in the two studies (28.4% in 1998; 28.1% in 1997).

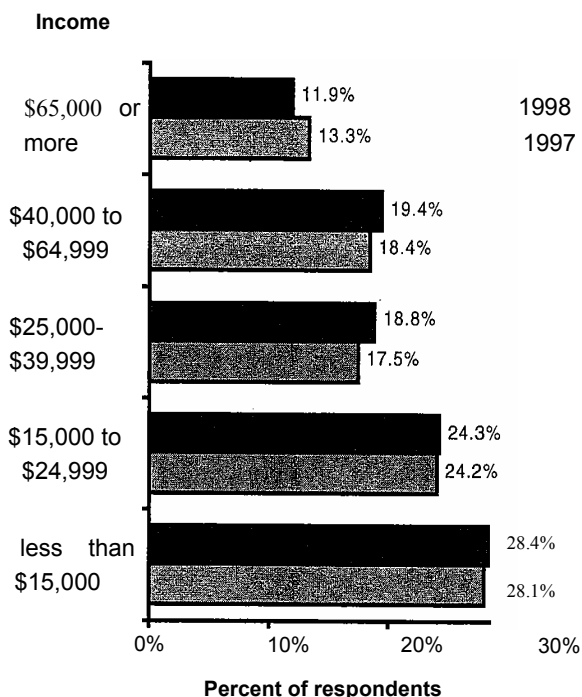


Figure 3. Comparison of 1997 and 1998 study respondents who considered fees to be "too high."

Visitors Satisfied with the Quality of Services

With increased fees, the 1998 survey found visitors were satisfied with the quality of services provided in the parks. The majority of respondents (87.7%) thought the services provided were either "good" or "very good" (Figure 4). 3.2% of respondents thought the services were "poor" or "very poor."

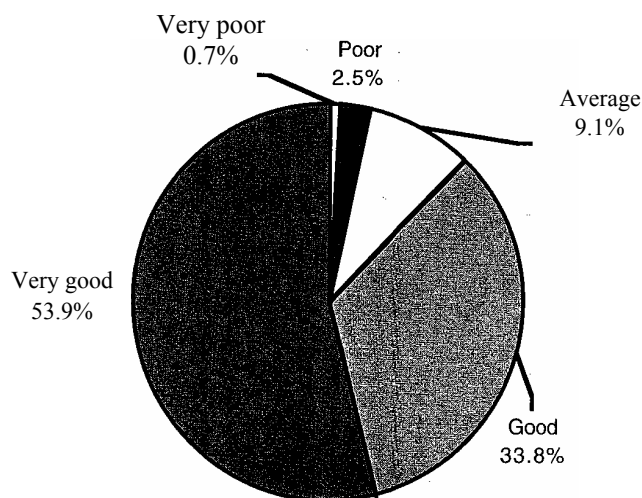


Figure 4. Quality of services, 1998.

Fee Collection at Parks is Quick and Easy

Visitors were asked to rate the level of convenience and amount of time it took to pay the entrance fees. Most visitors (95.7%) thought that gaining entry into the park was either "very convenient" or "reasonably convenient" (Figure 5). Similarly, the majority (97.5%) of visitors thought that fee collection took either "very little time" or a "reasonable amount of time" (Figure 6).

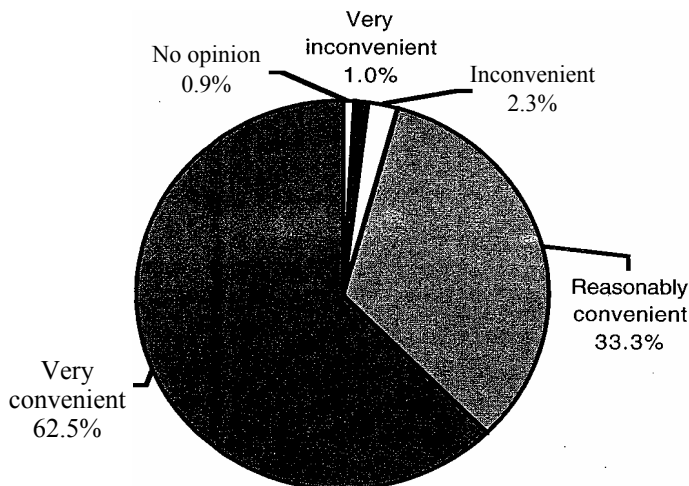


Figure 5. Ease of payment of entry fee, 1998.

Fees Can Be a Small Portion of Overall Trip Expense

For some park visits, fees can be a small fraction of total trip expenditures. For example, at Yellowstone and Yosemite National Parks, park entry fees accounted for 1.2% and 1.5% of total trip expenditures respectively.

Figure 7 presents average group trip expenditures for visits to Yellowstone National Park.

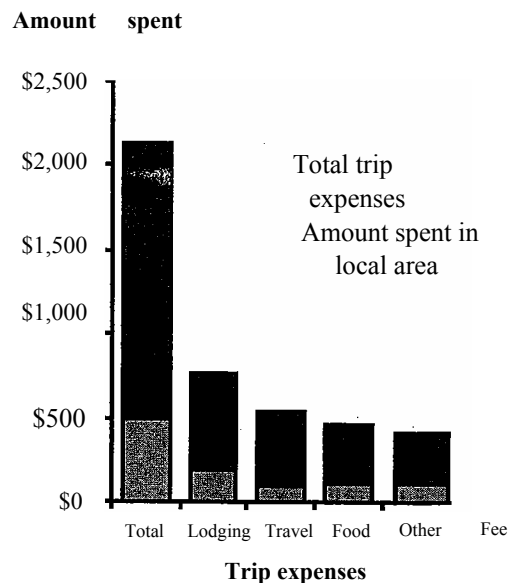


Figure 7. Mean reported local and total group trip expenditures, Yellowstone National Park 1998.

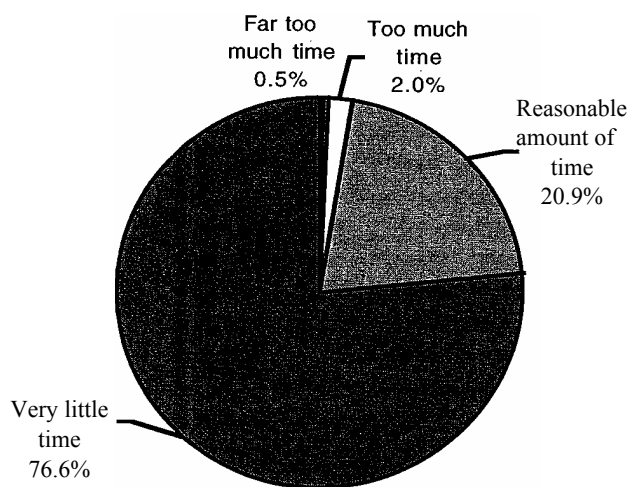


Figure 6. Time required for payment of entry fee, 1998.

Fee Increases Not Found to Impact Local Economies or Park Visitation

A concern of the NPS Recreational Fee Demonstration Program is that increased fees may decrease visitation and negatively impact local economies. To determine if this was occurring, several pieces of information were collected and analyzed: (1) visitor trip expenditures and the amount spent in the local area, (2) changes in visitation over time, and (3) overall structure, size, or composition of the local economy. The study focused on three park units: Yellowstone National Park, Yosemite National Park, and Independence National Historical Park. The results indicated no consistent related impacts on either visitation levels to the park units or on local economic activity. Details are available in the full technical report (see literature cited).

Study Methods

This 1998 study included visitor surveys in 13 selected NPS Fee Demonstration Program sites (Table 1). A sampling plan was developed for each park unit, specifying survey intervals and locations. At most parks, a stratified sample for 3 weekdays and 2 weekend days (on separate weekends) was used. Sampling was distributed among entrance stations proportional to the distribution of visitation among stations. The visitors were contacted on site and given mailback surveys. Two to three follow-up contacts were made following standard mail survey procedures (Dillman 1978). The overall response rate was 70.8%. Non-response bias was not significant.

For three NPS units (Independence National Historical Park, Yosemite National Park, and Yellowstone National Park), additional information was gathered from visitors,

park managers, and others in order to assess potential impacts on local and regional economies caused by the change in fees. General methods for linking changes in visitation and local economic impacts were applied. If no visitation decline or associated impact on the surrounding economy was supported by the visitation data from these sites, then the discussion of the local economy was limited to a general description of the relationship between the local economy and park visitation levels.

Care should be taken in interpreting the results reported in this study. The results presented are for a sample of 13 parks in 1998. The results should be interpreted as an indicator of the impacts of fees in the National Park System, but is not necessarily representative of each unit of the system.

Table 1. Proportion of visitors by types of fees paid at park units included in this study (as percent of total for each unit).

Park Unit	ENTRANCE FEES						Fee in Tour Price	Did Not Pay
	Vehicle Fee	Individual Fee	Annual Park Pass	Golden Eagle Passport	Golden Age Passport	Golden Access Passport		
Allegheny Portage RR NHS	3.4	37.8	-	6.7	22.7	1.7	7.6	16.0
Colonial NHP	32.5	41.2	2.1	4.5	14.4	0.4	2.5	1.6
Everglades NP	78.2	-	4.2	3.6	9.7	1.8	-	0.6
Frederick Douglass NHS	10.0	53.3	-	-	-	-	23.3	10.0
Glen Canyon NRA	63.1	0.7	4.0	10.7	12.8	-	8.1	-
Golden Gate NRA	8.9	64.7	-	1.1	1.5	-	18.6	1.1
Grand Canyon NP	63.8	2.8	0.4	12.6	15.4	1.6	2.0	-
Independence NHP	0.6	46.8	-	-	0.6	-	7.6	38.6
Mesa Verde NP	68.9	1.1	1.6	14.7	12.1	1.6	-	-
Sitka NHP	-	81.1	-	0.8	1.6	-	4.9	4.1
Sleeping Bear Dunes NL	83.2	0.8	2.5	1.7	10.1	-	-	0.8
Yellowstone NP	69.6	0.7	1.2	9.8	15.6	1.4	1.0	0.2
Yosemite NP	67.1	1.6	1.8	15.7	8.1	1.6	1.3	1.0

Literature Cited

Dillman, Don. 1978. *Mail and Telephone Surveys*. New York, NY: John Wiley.

Duffield, John, David Patterson, and Chris Neher. 1999. *Evaluation of the National Park Service Fee Demonstration Program: 1998 Visitor Surveys*. Final report submitted to the National Park Service Social Science Program. The University of Montana.

Lundgren, Allen, and David Lime. 1997. *Overview of a 1997 National Park Service Monitoring Study to Obtain Visitor Reactions to the Recreational Fee Demonstration Program*. Final report submitted to the National Park Service Social Science Program. University of Minnesota Cooperative Park Studies Unit.

The Authors

John Duffield, Senior Researcher and Research Professor at the University of Montana; **David Patterson**, Associate Professor and Associate Chair of the Department of Mathematical Sciences, University of Montana; **Chris Neher**, Research Associate, Bioeconomics, Inc.; **Nina Chambers**, Research Associate, National Park Service Social Science Program.

For additional information, or a copy of the full technical report, please contact:

National Park Service Social Science Program
1849 C Street, NW (3127)
Washington, DC 20240
Tel: 202.208.5391
email: gmachlis@uidaho.edu

